



Eye to Eye with a Crawfish in the Great Blue

Cathy Sakas, Education Coordinator for Gray's Reef National Marine Sanctuary

If a travel brochure had read “fall asleep to the soothing sound of snapping shrimp crackling in your ears, enjoy fine dining while fish watching, thrill to the underwater vistas of a beautiful coral reef, bask in the warmth of clear blue ocean water, and stretch the muscles of your mind and body while diving for seven plus hours each day”, wouldn't you sign up immediately? Well, I did! Only it wasn't a travel brochure that hooked me. It was a call from Dr. Steve Gittings, National Oceanic and Atmospheric Administration's National Marine Sanctuary Science Coordinator, asking if I wanted to become an Aquanaut. I leaped at the chance. Think of it, me living with the fish and lobsters and five very buff guys for ten days in the great blue under. I was definitely in!



Aquanaut Cathy Sakas found herself eye to eye with spiny lobsters during the Sanctuary Saturation Mission.

Of course this was not a vacation, far from it as a matter of fact. This mission was our National Marine Sanctuary (NMS) Aquarius Mission. Officially numbered Aquarius 2001-06, to us it was “Sanctuary Saturation”.

The four Aquanauts were your very own Billy Causey, Superintendent of Florida Keys NMS, Dr. James Lindholm, Research Coordinator for Stellwagen Bank NMS near Boston, MA, Laddie Akins, Executive Director of Reef Environmental Education Foundation (REEF) in Key Largo, FL and yours truly Cathy Sakas, Education Coordinator for Gray's Reef NMS near Savannah, GA.

Prior to the mission the four of us were put through a rigorous training program expertly led by National Undersea Research Center staffers Mark Hulsbeck, known to us as Otter, and Paul Masaki, an incredible free diver. Both men were tough yet always encouraging. “The surface is not an option” was drilled into our heads and referred to the fact that our surface was 47' down at our underwater habitat called Aquarius. With our

bodies saturated at 2.5 atmospheres, our routine was to dive for four hours in the morning, rest for four hours and do an afternoon dive for three and a half hours. Midway between our dives we checked in and refilled our double tanks at one of the fill-up stations. While filling up we talked to each other and to our ever vigilant and amiably attentive technicians and fellow Aquanauts Jay Styron and Mike Smith. These guys had the hardest task of all. They had to keep track of us, work on the habitat and tag fish, one at a time (one always inside Aquarius) venturing only as far as their hookah line would allow.



The Aquanauts pose for one last photo on land before the mission. From left to right: Cathy Sakas, Laddie Akins, James Lindholm, and Billy Causey.

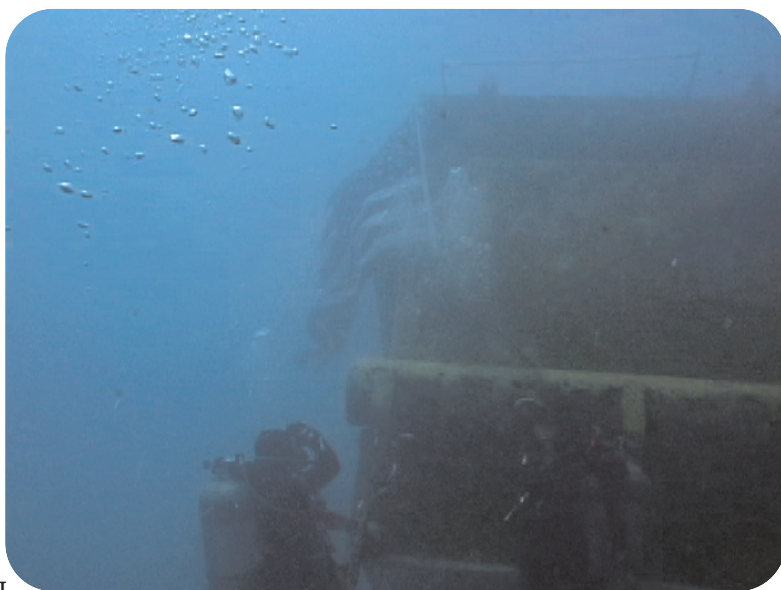
During our dives James and Laddie were a team, and I was lucky enough to have Billy as my partner. Our projects' compatibilities determined the teams. James observed the social foraging behavior of fish while Laddie censused fish populations. Their studies meshed well, and they could do their own research close by without getting in each other's way. They were never a breath's distance from each
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other, another safety tenet drilled home by our instructors. Our research had Billy and I working literally side by side, fin to fin. While I surveyed four 25 meter transect lines for benthic (bottom) cover, Billy assessed the size and condition of the hard corals on my first two transect lines. He also took time to video record the large schools of mutton snapper, gray angelfish and spotfin hogfish we were seeing after Tropical Storm Gabrielle passed by us. It was very impressive to see those fish in such large aggregations. Equally impressive was enduring Gabrielle while confined to Aquarius.

My work required that I keep my head down and my feet up. This offered me the opportunity to look at the bottom and touch it sparingly. While I was doing my work I had the advantage of seeing an amazing number of spiny lobsters. Again, after Gabrielle it seemed the lobsters came in by the droves. Under every nook and cranny, in every crack and crevice, the liquid black eyes of a wary lobster stared back.



The Aquanauts salute the American Flag that flew over the Aquarius during the mission in memory of those who lost their lives on September 11.

On one occasion, I noticed one of these beautifully marked crustaceans meticulously using her legs and mouth parts, called mandibles, to move water over her swimmerets. There nestled against her abdomen were hundreds of bright red, peppercorn-sized eggs. She kept water flowing over them to keep them free of debris and bacteria. It was fascinating to watch her. Eye to eye like that with a creature makes you do funny things. I had a mental conversation with this magnificent creature. I made her a promise that no matter what was happening in my crazy terrestrial world, I would do my best to make her salt water world a healthier, safer place for her offspring and theirs for generations to come.

Of course some would say I was “narced”, giddy from the high levels of nitrogen in my tissues from being saturated; however, I think I was just having one of those naturalist moments when you connect at some level with another life form. Ask Billy, Laddie, or James for other interesting stories from this truly incredible experience. Above all else, go and have a natural history moment all to yourself in the great blue of your own beautiful Florida Keys.

Cathy Sakas--Biography

Having lived her entire adult life on the Georgia coast, Cathy brings her experience in and knowledge of coastal natural history and her academic training in general biology (BS) and science education (MEd/S) to her work at Gray's Reef and to the National Marine Sanctuary Program. She is known to many in the southeast as the Coastal Naturalist through her two popular nature series of the same name that she wrote and hosted for Georgia Public Television.

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